

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A device for recording information contained in a printed document by scanning the printed document with a scanner pen to obtain at least two images of said information having partially overlapping contents, comprising:

a processing device for converting coherent pieces of the information in the images to a coded representation of the extent of the pieces of information in at least one dimension;

a comparison device for comparing the extent of the coherent pieces of information for determining an overlap position between the at least two images; and

an assembling device including a memory for assembling said at least two images to form a composite image in said memory; and

~~a character recognition device for processing the composite image and converting it to character code format.~~

2. (Canceled)

3. (Previously Presented) A device as claimed in claim 1, wherein said coded representation includes a division of the information inside borders, each comprising portions of the information.

4. (Previously Presented) A device as claimed in claim 3, wherein said borders include words included in said information.

5. (Canceled)
6. (Previously Presented) A device as claimed in claim 4, further including a character recognition device for processing each image and converting it to character code format.
7. (Previously Presented) A device as claimed in claim 1, further including a determining device for determining structures in each of said images.
8. (Previously Presented) A device as claimed in claim 7, wherein said determining device is adapted to identify direction of lines in each of said images.
9. (Previously Presented) A device as claimed in claim 8, wherein said determining device is adapted to identify text line directions.
10. (Previously Presented) A device as claimed in claim 8 or 9, wherein the determining device is adapted to identify direction of lines and text line directions utilizing a Hough transformation of each image.
11. (Currently Amended) A method for recording information contained in a printed document by scanning the printed document with a scanner pen to obtain at least two images of said information having partially overlapping contents, comprising:

converting coherent pieces of the information in the at least two images to a coded representation of the extent of the pieces of information in at least one dimension;

comparing the extent of the coherent pieces of information to determine an overlap position between the at least two images; and

assembling said at least two images to form a composite image; and

~~processing the composite image and converting it to a character code format.~~

12. (Canceled)

13. (Previously Presented) A method as claimed in claim 11, wherein said coded representation includes a division of the information in rectangles each including portions of the information.

14. (Previously Presented) A method as claimed in claim 13, wherein said rectangles include words included in said information.

15. (Canceled)

16. (Previously Presented) A method as claimed in claim 14, further including processing each image and converting it to character code format.

17. (Previously Presented) A method as claimed in claim 11, further including

determining structures in each of said images.

18. (Previously Presented) A method as claimed in claim 17, further including identifying direction of lines in each of said images.

19. (Previously Presented) A method as claimed in claim 18, further including identifying text line directions.

20. (Previously Presented) A method as claimed in claim 19, further including identifying direction of lines utilizing a Hough transformation of each image.

21. (Previously Presented) A method as claimed in claim 20, further including adjusting the perspective of each image in dependence of the direction of lines.

22. (Previously Presented) A method as claimed in claim 20, further including adjusting the rotational position of each image in dependence of the direction of lines.

23. (Previously Presented) A computer readable medium storing a program for carrying out the method according to any of claims 11, 13, 14, or 16-22.

24. (Canceled)

25. (Previously Presented) A device according to claim 1, wherein a coherent

piece of information is selected from the group of a symbol, a picture and a word.

26. (Previously Presented) A device according to claim 1, wherein the coherent pieces of information are words and wherein the comparison device is adapted to compare the length of the words in said images.

27. (Canceled)

28. (Previously Presented) A method according to claim 11, wherein a coherent piece of information is selected from the group of a symbol, a picture and a word.

29. (Previously Presented) A method according to claim 11, wherein the coherent pieces of information are words and wherein the step of comparing comprises comparing the length of the words.

30. (Previously Presented) A method for recording information contained in a printed document, comprising:

recording a plurality of images of the information by scanning the printed document with a scanner pen, the images having partially overlapping contents and each representing a part of the information;

identifying the graphical extent, in at least one dimension, of elements in the image;

converting the elements into coded representations of the graphical extent;
determining the overlap between pairs of images based on a comparison of the graphical extent of the elements; and
sorting out the images having redundant content based on the overlap.

31. (Previously Presented) A device for recording information contained in a printed document, comprising:

an imaging device which records a plurality of images of the information by scanning the printed document, the images having partially overlapping contents and each representing a part of the information;

a processor which identifies the graphical extent, in at least one dimension, of elements in the image and converts the elements into coded representations of the graphical extent;

a comparator which determines the overlap between pairs of images based on a comparison of the graphical extent of the elements; and

an extractor which sorts out the images having redundant content based on the overlap.

32. (Previously Presented) The method according to claim 30, wherein the information is selected from the group of a symbol, a picture and a word.

33. (Previously Presented) The device according to claim 31, wherein the information is selected from the group of a symbol, a picture and a word.

34. (New) A device according to claim 1, further comprising:

 a character recognition device for processing the composite image and
 converting it to character code format.

35. (New) A method according to claim 11, further comprising:

 a character recognition device for processing the composite image and
 converting it to character code format